

Saliva DNA Isolation Kit

Norgen's Saliva DNA Isolation Kit provides a fast and simple procedure for isolating genomic DNA from saliva samples collected and preserved using Norgen's Saliva DNA Collection and Preservation Devices. Purification is based on spin column chromatography, and the genomic DNA is preferentially purified from other cellular components such as proteins and RNA. The process first involves the collection and preservation of the saliva samples using Norgen's Saliva DNA Collection and Preservation Devices. The preserved saliva sample can be processed immediately, or alternatively can be stored at room temperature for over 2 years prior to DNA isolation. Saliva DNA purified using Norgen's kit is of the highest quality, and is compatible with a number of downstream applications including PCR, Southern Blot analysis, sequencing and microarray analysis. This kit can be used to isolate saliva DNA for *in vitro* diagnostic use.



Human genomic DNA extracted from buccal epithelial cells and white blood cells found in saliva can be used in various applications in diagnostics. The isolated DNA can be used for the detection of biomarkers to diagnose a disease, follow the disease's progress or monitor the effects of a particular treatment. Saliva DNA can also be used to diagnose particular types of infections. Isolation of DNA from saliva has become an attractive alternative to isolation from blood or tissue due to the fact that sample collection is non-invasive, the samples can be collected by individuals with little training, and no special equipment is required.

Kit Specifications			
Maximum Saliva Input	500 µL preserved saliva	Average Purity (OD 260/280)	1.8 - 2.1
Average Yield from 0.25 mL of Saliva*	7 µg	Time to Complete 10 Purifications	90 minutes (30 minutes hands on)

* Average yield will depend on the donor

Saliva DNA Isolation Kit Benefits

Fast and easy processing	Rapid spin-column format allows for the processing of 10 samples in 30 minutes (hands-on).
Compatible with Norgen's collection and preservation products	This product allows for the isolation of DNA from samples collected and preserved using Norgen's Saliva DNA Collection and Preservation Devices.
Sample collection is non-invasive and painless	Saliva offers an attractive alternative to blood or tissue for the isolation of human DNA samples for use in diagnostic applications.
Recovered DNA is suitable for various downstream applications	Purified saliva DNA can be used in a number of downstream applications including <i>in vitro</i> diagnostic use, PCR, Southern Blot analysis, sequencing and microarray analysis

Saliva DNA Isolation Kit

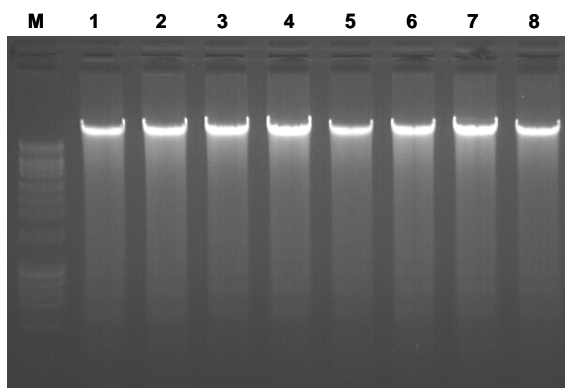


Figure 1. High Quality and Yield of DNA from Saliva Samples. Total DNA was isolated from 250 μ L of eight different saliva samples using Norgen's Saliva DNA Isolation Kit (Lanes 1-8). For evaluation, 20 μ L of each 100 μ L DNA elution was run on a 1.0% agarose gel. Note the high yield and quality of the DNA in all lanes. Lane M: Norgen's HighRanger 1kb DNA Ladder.

Saliva DNA Isolation Kit Contents

1. Proteinase K
2. Binding Solution
3. Wash Solution
4. Elution Buffer
5. Spin Columns
6. Elution Tubes
7. Product Insert

Storage Conditions

The kit contains ready-to-use Proteinase K which is dissolved in a specially prepared storage buffer. The Proteinase K should be stored at room temperature or 4°C up to the expiry date indicated on the label. All other solutions should be kept tightly sealed and stored at room temperature (15 – 25 °C) up to the expiry date indicated on the label without any reduction in kit performance.

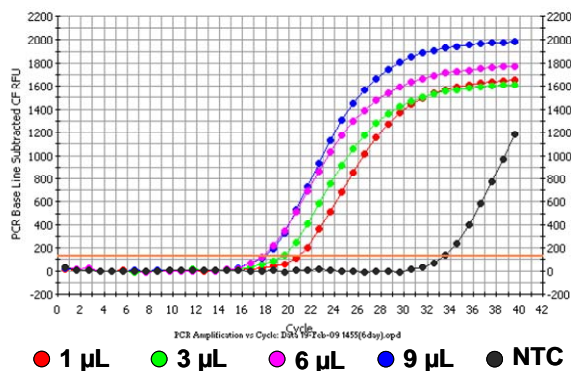


Figure 2. Detection of the Human 5S Gene using SYBR Green Real-Time PCR

Saliva DNA isolated from a 250 μ L saliva sample using Norgen's Saliva DNA Isolation Kit was used as the template in a SYBR Green real-time PCR reaction to detect the human 5S gene. The DNA could be successfully amplified without any inhibition when 1, 3, 6 and 9 μ L of saliva DNA was used as the template, indicating the excellent quality of the purified DNA for use in downstream applications.

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors
- Water (for rinsing of mouth)
- Norgen's Saliva DNA Collection and Preservation Devices
- 96-100% ethanol
- 55°C incubator

Shipping Conditions

The Saliva DNA Isolation Kit is shipped at room temperature.

Cat #	Description	Quantity
45400	Saliva DNA Isolation Kit	50 preps